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La Revue Agricole

DE L'ILE MAURICE

La Commission d'enquête sur l'Industrie Sucrière

Les Commissaires nommés en août 1937 pour enquêter sur les causes des grèves, ont récemment remis leur rapport au Gouvernement. Ce rapport édité par les soins du Gouvernement constitue un volume in-8° de 250 pages environ. Il représente un travail considérable. Les enquêteurs ont voulu étudier le problème de la main-d'œuvre et celui des conditions de l'industrie sucrière dans leur ensemble.

Les trois premières parties ont trait aux causes des grèves et aux conséquences qui en ont résulté. Les chapitres suivants concernent la culture de la canne, l'organisation de l'industrie sucrière, les plaintes des petits planteurs, la question de la canne Uba, les intermédiaires, les sociétés de crédit, les doléances des laboureurs, les trade-unions, les gages des ouvriers agricoles, la position économique de l'industrie sucrière.

Il serait très difficile de résumer dans une revue comme La Revue Agricole, un rapport aussi important. Nous croyons préférable de citer les principaux passages des divers chapitres, passages pouvant donner une juste idée de l'appréciation des enquêteurs sur nos conditions économiques.

Les lecteurs de La Revue pourront se faire une juste idée de la situation en comparant les conclusions de la Commission d'Enquête aux données de M. A. Britter.

Report of the Commission of Enquiry into Unrest on Sugar Estates in Mauritius, 1937.

SUMMARY OF PRINCIPAL CONCLUSIONS AND RECOMMENDATIONS.

Immediate and real causes of the unrest.

389. (1) The immediate cause of the outbreak of the unrest was the cut of 15 per cent. in the Uba cane carried out by the directions of the manager of the Sans Souci Estate Co. Ltd. (Paragraph 116). This cut itself would not have brought about such a big strike and such a widespread manifestation of discontent had there not been other causes at work as well. The real cause which brought about the outbreak of the strike

was the cumulative effect upon the workers of Dr. Curé's labour campaign and his speeches delivered to audiences of Indian and other workers on sugar estates on behalf of the Mauritius Labour Party which he founded, assisted by his associates, Mr. Anquetil and Pandit Sahadeo. (Paragraphs 204 and 205). At the same time, a general rise in the standard of living of the Indian inhabitants in Mauritius has been an important element in causing discontent amongst Indians with their present lot.

Dr Curé's propaganda responsible for the outbreak of the strike.

204. While we realize that many labourers had grievances, with which we deal elsewhere, and were anxious to secure higher wages and better conditions of employment, we have come to the conclusion, neverthless, that whatever may have been Dr. Curé's motives, his speeches and those of his supporters taken together have had the effect that speeches of this nature must have upon the minds of relatively impressionable and uneducated labourers ; namely, to create discontent if it did not already exist and to increase it where it existed already. There could not have been such a widespread manifestation of discontent without some systematic propaganda and Dr. Curé's propaganda is the only one of which we are aware.

THE ORGANISATION OF THE SUGAR INDUSTRY

Two divisions of the sugar industry. (a) Sugar estates. (b) Small planters.

247. The sugar industry may be divided into two sections. In the first place there are the estates possessing factories working in conjunction with estates possessing no factories. Estates with factories, we have seen, number thirty-eight and those estates without factories number about thirty-five. In the second place there are some 20,000 small planters, that is to say, planters who supply the factories with less than 1,000 tons of cane for crushing. The actual amount of canes supplied to the factories by these small planters during the 1936-37 crop, according to figures supplied to us by the estates, amounted to some 466,431 tons of cane. The total amount of canes crushed during the 1936-37 crop was 1,367,063 tons and small planters and big planters without factories together, supply no less than 1,183,827 tons or nearly 50% of the whole of the total tonnage of canes crushed by the various factories. The table of returns set out in the Appendix shows the number of small planters supplying each factory with cane and the total tonnage of canes in each case, although in four cases no returns were given.

The progress of the Indian labourer.

252. We deal elsewhere with the specific grievances of the Indian agricultural labourer, but we think it desirable to mention certain matters of general interest concerning him here. We have been impressed by the general testimony of the estate managers as to the great changes in the habits and standard of life of the Indian agricultural labourer. This change amounts to little more, in our opinion, than keeping pace with changes affecting the whole of the population of Mauritius. The cinema, the motor car and the motor bus have all played their part in changing

the Indian labourers' outlook on life. Visits to the cinema and rides by motor bus or taxi seem to have become an indispensable part of their existence. This gradual change in habits was accompanied just after the war by an astonishing increase in prosperity in the sugar industry owing to the altered circumstances brought about by the war, which was followed in turn by an enormous economic depression which sent the price of sugar down. Thus, in 1913, the price for sugar was Rs. 6.95 for 50 kilos. In 1919, 50 kilos of sugar sold for Rs. 22, and in 1920 for Rs. 50. Indian labourers were earning in a week as much as they could obtain in a month previously, and while many invested their money in the purchase of land, others spent it unprofitably and there was a noticeable general slackening in output of work. Indeed, there seems to be no doubt that many Indian labourers to-day will not work for more than four and occasionally five days a week, although certain Indian labourers appearing before us have stated that they are unable to work longer owing to physical exhaustion.

Enquiry by Kunwar Maharaj Singh.

253. The Indian Government has always taken a paternal interest in the progress of Indian labourers outside India, and in November, 1924, the Government of India deputed Mr. (now Sir) Kunwar Maharaj Singh to visit Mauritius for the purpose of enquiring into the effects of further immigration on the economic conditions of the Indians already in Mauritius, for owing to a shortage of labour at the time, it had been proposed to revive the immigration of Indian labourers to Mauritius, which had ceased in 1922. By the end of January Mr. Kunwar Maharaj Singh had completed his enquiries and it is interesting to note that in a letter dated 23rd January, 1925, addressed to the Government of Mauritius, he says :

> " I have satisfied myself from what I have seen, as well as heard and read, that as a whole the Indians, most of whom or their forefathers came to this colony as indentured labourers, have prospered. In not a few cases they have amassed considerable wealth and in general, considering the classes from which they have come, they are more prosperous here than they would have been, had they remained in India. This fact, in my opinion, reflects great credit not only on the Indian community, who by their industry and thrift have improved their lot, but also on the people of the Colony in which they have made such progress ".

THE COMPLAINTS OF THE SMALL PLANTERS.

Complaint of small planter as to amount charged by factory.

254. There is a very general complaint made by small planters that they do not receive sufficient sugar from the miller per ton of cane sent to the mill to be crushed. In the majority of cases where the small planter is in direct contractual relations with the factory owner,—and we have seen that they are some twenty thousand in number,—the miller retains a portion of the sugar derived from the canes and hands back the balance to the small planter, who, it is important to remark in this connection, at present sells it through the Syndicate for exactly the same price in

London as is obtainable by the miller. In some cases, however, a money payment is made for the canes supplied which varies from some Rs. 7 to Rs. 8 per ton at the present time. This complaint is generally linked with another complaint, with which we deal later on, that the operations of the cane dealer or middleman deprive them still further of some few kilos of sugar.

Payment for small planters' canes.

255. The system of paying for planters' canes is one which deserves careful attention. This question has been agitating the sugar industry in Mauritius for some years past The system in force in Mauritius was described in 1922 as follows by Dr. Tempany, Director of Agriculture :—

> " The most usual basis is that by which a planter gets two-thirds of the extraction of the mill in kilos of sugar per ton of cane which he delivers. Thus, if the mill takes ten tons of cane to make one ton of sugar, the extraction is 10% ; the planter gets two-thirds of 100 kilos or 66 kilos of sugar for every ton of cane he delivers. This is based on the actual results of the mill ".

There was another system in vogue in Mauritius at that time, whereby the planter was paid on the extraction of first-grade white sugar (Vesou), (which has largely disappeared to make place for raw sugars), or, alternatively, on all sugars per ton of cane delivered. The actual quantities of sugar paid to the planter under this system ranged from 60 to 70 kilos, according to the factory, the district in which the factory was situated and the efficiency of the factory in extracting sugar from the cane. In 1922 a good many factories were actually giving 70 kilos of sugar for every ton of cane delivered. The planters were given the alternative of taking their sugar from the factory and selling it themselves, or, if they preferred so to do, the sugar was marketed and sold as factory sugar, and brokerage charges, cartage, cost of transport from the factory to the docks, warehouse charges and all other incidental expenses were added, and the balance handed to the planter usually during the crop. Where this latter system was in vogue the factories made advances to the planters at the time the canes were delivered, under weekly arrangement, and sometimes these advances amounted to 10/- or 20/- per ton or more, according to the price at which the sugar was sold, and when the sugar was finally sold, payment was made to the planter of the balance of the money due to him.

The present system of payment for small planters canes.

256. In 1927, when the Mauritius Sugar Industry Conference was convened, the system became the subject of an interesting memorandum prepared by Dr. Tempany. Dr. Tempany and others took the view that the principle to be followed in the acquisition of planters' canes was that the planter and the miller should be considered as members of an association where the profits and losses were equally shared. They came to the conclusion that if this principle was admitted to be an equitable one, the treatment hitherto accorded to planters by the factory in payment for their canes was generous. In former times payment was made in terms of the average extraction of the factory, which process had the advantage that the payment varied according to the richness of the cane and the

efficiency of the factory in extracting the juice, which ensured a certain amount of elasticity. It was, however, due to the competition amongst factories to obtain as large an amount of planters' canes as possible that brought about the general adoption of the present system of payment for canes in terms of sugar per ton of cane delivered. The rate at which payments are made at the present time varies generally between 60 and 80 kilos, the general average being somewhere round about 69 kilos. The amount has been fixed irrespective of the actual yield of sugar per ton of cane. These terms apply essentially to large planters on estates possessing no factories, but in the case of small planters the canes are very frequently, though not exclusively, supplied to the miller through a cane dealer, the terms given by a factory to the dealer being much the same as those given to a planter on an estate without a factory ; but the contract of the cane dealer with the factory usually contains a clause authorizing the dealer to retain for himself, as a reward for his services, some five or six kilos of sugar per ton of canes. In many cases a provision is inserted in the contract whereby a minimum amount of sugar is to go to the small planter.

Principle formulated at the 1927 Sugar Industry Conference accepted.

258. We accept the principle which was formulated at the Mauritius Sugar Industry Conference of 1927 and think that the only way in which the relations of planters without factory and of small planters to the millowner can be envisaged, is by considering both parties to be partners in one and the same industry. That being the case, it seems to us to be only equitable that some system should be devised whereby both parties will receive the satisfaction of knowing that it is in their own interest to strive to obtain the maximum amount of sucrose content in cane production and the maximum amount of sugar in factory extraction.

. . . . . .

We have come to the conclusion that the quantity of sugar per ton of cane hitherto given to the planters and small planters by the factory for the services rendered in the crushing of their canes is one of the highest in the world and we set out below a comparative table submitted to the Brisbane Conference of Sugar Technologists of 1935 showing the amounts of sugar given to planters in the various sugar producing countries of the world :

Country	Sugar value to Grower
Hawaii	48
Argentine	50
Philippine Islands	50–60
Porto Rico	62.5
Java	cost of production plus ½ profit
Mauritius...	60–70
Louisiana...	50–60
British Guiana	55
Antigua	40% plus ½ profit
Australia...	60–75

Payment to be on basis of Sucrose content.

261. We consider that the only true test as to whether the factory is receiving a fair return for its services, in the sense that it is making a profit, however modest, by crushing small planters' canes, is by means of a chemical test of the sucrose content of the canes of small planters made during each crop with the object of determining the amount of sugar likely to be extracted. We think that each category of small planters' canes should be analysed, for the richness varies from year to year, and the price to be paid by the small planter should be charged accordingly. We believe that the majority of canes when crushed by the factory on terms which assure the factory a profit, always leave a fairly reasonable margin of sugar for the small planter, but the sucrose content of small planters' canes varies from year to year according to changes in climatic conditions and according to any change for the better in methods of cultivation. Thus, in cases where on the basis of payment as made hitherto one ton of canes supplied to the factory by a small planter contains 10.5 sucrose content, or, in other words, yields 105 kilos of sugar, the small planter receives sixty-five kilos, the miller retaining forty kilos for himself as payment for his services in milling the cane. But when the sucrose content decreases, the small planter receives the same amount ; and this is also the case should there be an improvement in yield. Thus, where the chemical analysis shows the sucrose content in a ton of cane to be 12.5, the small planter continues to receive sixty-five kilos of sugar while the mill-owner receives substantially more, that is about sixty kilos of sugar. On the assumption that forty kilos of sugar just covers factory charges, it seems that the extra twenty kilos would be a profit to the mill-owner which he does not share with the small planter.

THE UBA CANE QUESTION

265. The principal grievance of the small planters was the reduction of 15 per cent, announced for the first time in 1937 during crop time, in the consideration hitherto paid for the Uba canes supplied by them from the Rich Fund, Lalmatie, St. Julien and Bon Accueil areas in the Flacq district, these being the principal parts in the island where this particular type of cane is grown. This grievance, therefore, is not common to the whole industry, being restricted to those parts of the Flacq district mentioned above. Its importance lies in the fact that, as we find in paragraph 116, the cut of 15 per cent. on the Uba cane was the immediate cause of the outbreak of the unrest and that any contemplated solution of the problem must take into account many uncertain and complicated factors. As we have already indicated, the case for the estate manager is that he loses money by taking the Uba cane and that the small planter should replace it by a better cane. The case for the small planter is that he was confronted without warning by a drastic reduction in the amount hitherto granted to him by the estate over a comparatively long period of years, and he asks for the cut to be abolished. The facts leading up to the Uba cane crisis themselves have been ascertained with tolerable accuracy and we set them out below.

Richness of the Uba cane compared with other canes.

278. Asked by the Commission whether he could say what induced him to come to the conclusion that the Uba cane was not a profitable pro-

position from the point of view of the Sans Souci Company, Mr. Robert told us that from numerous analyses which had been made in the estate laboratory of the various types of Uba cane, he found that it gave an average richness of 11. He explained that the analysis was carried out as follows. When the Uba canes are taken to the factory they are loaded on to the chain and crushed ; the juice taken for purposes of analysis, however, is mixed up with that coming from a certain percentage of other canes which go through the crushers at the same time as the Uba. These latter canes may be Big Tanna or other rich varieties. The result is that the analysis carried out, which is afterwards considered to be an analysis of Uba juice, is probably a little higher than if an analysis of the Uba cane juice only were made. The average purity of the juice was found to be 75 ; with such a degree of purity it was, in Mr. Robert's view, impossible to obtain an adequate recovery. As a result the extraction from Uba cane did not exceed 8.80 and consequently a ton of Uba cane would yield 88 kgs. of sugar. If from that amount were deducted 70 kgs. which, on an average, is the amount of sugar given by the factory to the planter, there would remain only 18 kgs. as the share of the factory and this, at the rate of Rs. 12 per 100 kg., would work out at Rs. 2.16 for the factory. From this, however, must be deducted the cost of transport of the canes from localities such as Lalmatie and St Julien, which had to be borne by the estates and which amounted to R. 1.50 per ton. In addition there were weighbridge expenses, the salary of the weighbridge official, loading, watchman's salary, salary of the official employed to maintain general supervision over the planters of the locality, all of which taken together worked out at the rate of 36 cents per ton of cane. On the other hand, the value of molasses and scums which accrue to the estate out of a ton of cane and are not returned to the small planter, represents some 30 cents ; thus the cost of manipulation of one ton of cane amounted to Rs. 4.30. Consequently, if Rs. 2.16, which accrues to the factory, was deducted from the Rs. 4.30 (the total cost of manipulating one ton of cane) the result was, according to the calculations of Mr. Robert, that the estate was losing Rs. 2.14 per ton of Uba.

Conclusions and recommendations.

288. We are satisfied that the Uba seedling grown in the Lalmatie district gives a much poorer return than other canes, and we have indicated that from the purely contractual point of view the Sans Souci and other estates concerned are perfectly entitled to refuse to accept Uba canes on terms which mean a loss for them. But the unfortunate thing is that what appears to be an unprofitable situation for the factories has been allowed to continue for so long. We accept the assurances given to us by the manager of Sans Souci estate that notices were posted up warning small planters not to plant the Uba cane ; but while we cannot say to what extent planters were aware of the contents of the notices, not the slightest attention was paid to them ; and in spite of the fact that the contracts with cane dealers contained a clause authorising the estate to refuse to take canes not to their liking, the Uba cane was in fact supplied by dealers and accepted by the factory in spite of the warning not to plant Uba, and virtually nothing whatever was said or done to prepare the planters for the forthcoming cut. We find ourselves in complete agree-

ment with Mr. Robert when he says he thinks the small planters might have been surprised at the cut; and we go further and say that we are surprised that no effective notice of the cut was given, the more so as Mr. Robert admits quite candidly that the real object of the cut was not to obtain a higher percentage of sugar in return for crushing the canes, but to make the small planters realize that they must not plant Uba cane any longer. Mr. Robert may well be justified in seeking to do so, but we do not think the best course was adopted to secure his object. In a colony where agriculture is almost the sole industry any action tending to prohibit the planting of some 45,000 tons of canes at least by small planters, poor labourers for the most part, cannot in our opinion be properly regarded as limited to be a mere matter of private contractual relationship. The livelihood of many members of the community is bound to be prejudicially affected and discontent is bound to arise. The Department of Agriculture is the one directly concerned with questions of planting, but the Department does not appear to have taken any action to find a substitute for Uba until complaints began to come in about the cut of 15 per cent. Indeed, the hastiness with which the cut was decided itself precipitated the strike. It is clear, however, that the Department of Agriculture will be largely concerned with any proposed solution of the Uba question. We cannot but regret, however, that this question was not taken in hand at an earlier date. The Royal Commission of 1909 made an important recommendation to the effect that the Department of Agriculture should maintain the closest contact with the estates and small planters. That recommendation has not been translated into action so far as we are aware, and we ourselves make a recommendation to this effect. Had the Department of Agriculture been closely in touch with the estates prior to the unrest, the problem created by the Uba cane might conceivably have been avoided.

(*To be continued*).

A COMMENTARY ON FACTS

by Alfred D. BRITTER

L'étude que nous publions sur les principaux résultats provoqués par les dernières grèves sur les propriétés sucrières est d'une importance dont nos lecteurs se rendront compte.

M. Britter est le Secrétaire de la Chambre de Commerce. Travailleur infatigable, esprit chercheur, il était admirablement placé, vu sa compétence, pour mener à bien une étude de ce genre. Elle résume d'une façon judicieuse les conditions dans lesquelles se trouvait et se trouve la main-d'œuvre à l'Ile Maurice. Elle montre les efforts faits par les planteurs pour abaisser le coût de production. Elle examine les divers facteurs influençant le prix de revient. Elle expose le mécanisme de l'achat des cannes. Elle mentionne les appréciations des diverses personnalités qui ont été appelées à s'occuper de l'industrie sucrière mauricienne. En un mot, elle constitue un faisceau de preuves établissant que les accusations portées contre les planteurs n'étaient pas justifiées.

L'étude de M. Britter a été publiée sous forme de brochure et a été remise aux Membres de la Commission d'enquête.

Ces Messieurs ont dû être frappés par toutes les données mises en relief par l'auteur.

Il est un fait indéniable : si les ouvriers agricoles ont eu à souffrir, et ce n'est que d'eux dont parle M. Britter, c'est que le Capital s'est trouvé dans des difficultes insurmontables. La richesse du pays s'est vue réduite de ce fait. On en a la preuve par la chute constante du prix de la tonne de sucre, malgré l'augmentation de la préférence.

Nous félicitons M. Britter d'avoir contribué si puissamment à faire la lumière sur les conditions de notre principale industrie. Les planteurs lui sont reconnaissants de sa coopération et l'en remercient vivement.

La *Revue Agricole* croit utile de reproduire cette étude afin que les autres pays sucriers soient renseignés sur nos méthodes d'exploitation et la part large que nous faisons à ceux qui nous assistent.

P. de SORNAY.

PREFACE

The events which occurred in July 1937 and lasted throughout the month of August and part of September are without precedent in the history of the Colony. There is no need to recapitulate the story of this outbreak of unrest and disturbance, which led to violence and bloodshed. The facts are known.

The unrest itself was perhaps not entirely unexpected as it was known that for the previous 18 months, extensive and systematic agitation had been carried on in nearly every village and labour camp in the island, with an organised thoroughness worthy of a better cause.

If the outbreak, and the serious aspect it assumed, came as a surprise to the authorities and to the general public, undoubtedly this was due to the fact that to those who have some sense of perspective and of relative values, there appeared to be no genuine grievances to be remedied and none which could be redressed. Moreover, it was felt that the common sense with which the Indian labourer is generally credited, would enable him to see through the camouflage of the agitator, and that, instinctively, he would detect the underlying motives.

The chapter of grievances formulated by labour witnesses and by small planters who have been induced to join in the unrest or who are themselves part-time labourers, represents a well-framed up indictment of the Sugar Industry.

Without having had any opportunity to consider demands of any kind ; without anything in the nature of an ultimatum ; without any warning that grievous dissatisfaction prevailed, the Sugar Industry of this Colony was faced, at the very outset of the harvesting season, with a grotesque series of claims for higher wages, better treatment, less work, more rations, shorter hours, better housing, higher prices for planters' canes, and other violently expressed demands, for which loud clamour was made by organised masses of terrorists and intimidators.

The very fact that large numbers of people in the Colony, and, no doubt, many outside the Colony, have been led, or whose natural inclination leads them, to believe in the existence of those grievances, compels us to consider them.

The local Government very wisely appointed a Commission of Inquiry to report on the causes of the unrest.

This survey represents an endeavour to deal with the principal issues raised by the labourers themselves and by those purporting to represent them, and whatever may be the view taken of our effort, we sincerely hope that the facts we outline and the relevant evidence we submit will prove helpful to any serious consideration of the problem as a whole.

We wish to offer our grateful acknowledgments to friends, who spontaneously gave us their assistance and the loan of documents, and who otherwise encouraged us to proceed with the work we had undertaken.

Our special thanks go to the General Printing and Stationery Co., Ltd., for the prompt and efficient manner in which they have dealt with the printing and publishing of the manuscript.

A. D. BRITTER,
Exchange Rooms,
Port-Louis.

November, 1937.

INTRODUCTION

In this survey of the issues raised during the recent unrest on the Sugar Estates of the Colony, we have endeavoured to establish the broad lines on which those issues rest.

We have attempted to bring them into that perspective which, in our view, is essential to any just appreciation of the relevant facts ; our object in so doing is to counter the tendency, manifested in some quarters, to isolate the problem, and to examine it in its purely local setting, where the venue is too restricted to afford a sufficiently extensive prospect.

The events we have witnessed have raised issues that are not purely local in their bearing ; the problems involved have covered a much wider field, and, inasmuch as the Sugar Industry of Mauritius is neither self-supporting nor independent of world economic conditions, the sphere of its problems cannot be narrowed.

Before expressing our views on these considerations we feel it necessary to state that we fully appreciate the undoubted qualities and attributes of the Indian labouring population of Mauritius ; we freely recognize that it is largely due to their native qualities of economy and steadiness that they have secured the prosperity which is theirs by right.

Allegations have been made by leaders, who have not sprung from their own ranks, of subjection of the labouring population by the Sugar Industry : serious charges of oppression, ill-treatment and malpractice by employers have been formulated and repeated, wholesale and retail.

Subversive agitation, carried on with systematic persistency, has undoubtely created an atmosphere propitious to the hatching of grievances ; the allegations, on the whole, have been so grave that we have been compelled to bring forward the available evidence to show that this offensive indictment of the Industry is radically false and entirely misleading.

We have been constrained, in order to deal effectively with the well-staged tale of woe and oppression, to reproduce the facts in their proper light. If, in so doing, we cause any offence to susceptibilities, we would wish to say, unreservedly, that we regret it, and that no more offence is intended when we refer to the condition of immigrants than would be implied in a reference to the status of the primitive tribes that crossed the Alps or the Rhine in the distant past.

Our survey, in the first place, outlines a general perspective in order to establish the status, requirements, and aspirations of our labouring population in their appropriate world setting.

We then proceed to deal with the following issues :—

Living wage consideration ;

Capacity of Industry to raise wage level ;

Conditions, past and present ;

Reduction of Cost of Production to meet market collapse ;

Cost of production in the immediate future ;

Purchase of Planters' Canes by the Factories ;

Condition and treatment of labouring population.

Our survey of those issues is followed by a general Conclusion, and by an Appendix, in which the following economic considerations are examined :

Depreciation of Wage-paying capacity of Colony ;
Appreciation in Value of Wage in relation to a cost of living index ;
Imports of essential foodstuffs ;
Capital and Labour ;
The Planter-Labourer and Labourer-Planter.

A reproduction of certain Statements to which reference is made in the text, completes our survey.

We have not dealt with certain minor points that have grafted themselves to the general problem.

No attempt has been made to undertake anything in the nature of a financial investigation. Our arguments and submissions are established, mainly, on what we consider to be a rational view of the fundamental issues.

We have done our best to ensure the relative value and comparative sense of returns and statements embodied in the text.

If the perspective we have drawn can supply a broader view of the situation and help us to assess and weigh up the factors with an open mind, and in a wider sphere, we will have served the aim we have set ourselves.

A SURVEY OF THE PRINCIPAL ISSUES

The grievances formulated during the recent unrest have taken the shape of numerous complaints elaborated by labourers and small planters against the Sugar Industry, and an apparently determined attempt has been made to allege that these grievances are genuine, and that they can be removed or redressed by the interests concerned.

The complaints levelled against the Industry have covered practically the whole range of the relations existing between employer and employee and the issues raised thereby have involved the wide field of general conditions prevailing on the Estates of the Colony. On the whole, the principal issue revolves around the question of adequate remuneration for labour and services.

The evidence submitted by Labour witnesses to the Commission of Inquiry tends to indicate that no satisfactory solution of the problems raised by the recent unrest on the Estates would be forthcoming unless two leading issues are dealt with and determined.

These two issues are :

(a) Are Estate labourers receiving a living wage under present conditions.

(b) Is the Sugar Industry in a position to increase those wages.

Before dealing with those two points in detail, it is necessary to outline certain broad considerations which, in our opinion, must govern any endeavour to weigh up the issues on the question of a living wage under the conditions we have to deal with.

I

GENERAL PERSPECTIVE

It is evident that any attempt to deal with this question of wages, which restricts itself to a mere reckoning of outward and visible factors, cannot pretend to do more than touch the fringes of the proposition. The proposition itself has an extremely wide scope, and involves considerations that are fundamental in their bearing, to ignore which would manifestly be fatal to the satisfactory solution of the problem.

It is, in our view, of primary importance, to observe that there are certain outstanding realities to be faced, which have not been brought up in the evidence submitted to the Commission, but which we consider it is essential to outline.

In outlining these issues we do so because we are convinced that no satisfactory solution of the problem under review can be arrived at through a short cut to conclusions. We submit that any avoidance of the realities to which we refer would remove the question from its essential perspective.

In the first place we would wish to stress the point that Mauritius, like most small Colonies similarly placed in the general scheme of things, is entirely and absolutely dependent on the economic conditions ruling in the sphere in which we evolve.

We fail to see what really useful purpose can be served by allowing the Labouring population of Mauritius to overlook the patent fact that it *happens to be* a labouring population in an extremely remote community, where, by the inexorable law of things, it must, necessarily and inevitably, subordinate its standard of living to the level of those standards which rule in labouring populations similarly placed, in the same general economic scheme, as tropical primary producers, the product of whose labours is in open competition on a notoriously depreciated world market.

It would be grossly unfair to our labouring population itself to induce it, as has been attempted in some quarters, consciously or unconsciously, to acquire the notion that its standard of living must be established on what it can compel the industry to pay by intimidation or otherwise.

The fact cannot be denied that what constitutes a living wage for labour in a Colony like Mauritius cannot include those elements to which a population more favourably situated can legitimately aspire ; inasmuch as the various elements which go to form a living wage cannot be fixed on a hard and fast basis, the constitution of a living wage must always remain a matter open to very elastic interpretation.

Although we entirely agree with the very humane and perfectly fair principle that every individual in a community has a legitimate right to aspire, not only to the essentials, but to the good things of life, we cannot avoid the conclusion, which is a self evident fact, that the elements which constitute a living wage for the Mauritian labourer cannot go beyond the level of those elements to which labourers evolving in the same economic sphere have to restrict their aspirations.

If it could be shown that the labouring population of Mauritius were not able to afford the essential elements of life, and that their present

wages were such as precluded them from obtaining those vital foodstuffs which they could obtain under more favourable conditions in the past, such a revelation certainly would assume a pathetic aspect, requiring immediate and urgent consideration.

Such a state of affairs fortunately does not exist; there is not the slightest evidence to support the view that the labouring population is under fed, and that they are suffering from a greater degree of under-nourishment than that which existed when their economic condition was admittedly much more prosperous than it is now.

In another part of this Memorandum we submit the strongest possible evidence in support of the view that there is not, in actual fact, any indication to support the belief entertained in some quarters that under-nourishment exists to a greater extent than in the past.

Apart from this vital aspect of the problem, we fail to see what remains of the suggestion advanced and implied, that the wages of labour in this Colony do not constitute as reasonable a living wage as is consistent with the situation of the Mauritius labourer, in the economic sphere to which he belongs, in the colonial conditions of a world market in which his labour has to compete.

There is not an iota of evidence to show that the wages of labour in Mauritius are on a lower level than those ruling in India, in Malaya, in the East Indies or in the West Indies, to mention only those territories, where labourers of Indian origin are producing primary products under more or less the same economic conditions.

It cannot seriously be maintained without verging on the ridiculous, that there is some intrinsic value or some tangible superiority in the Mauritius labourer, which entitles him to gravitate on a higher plane; it is surely a hollow suggestion to imply in any way that he is entitled to a higher standard of living and to nourrish aspirations which must be denied to the labourer in those other territories.

The economic circumstances which govern the status of labour, in the aggregate, throughout the territories where primary products are produced under similar conditions, do not, of course, preclude the individual from evolving from the level of the general stratum to a higher state. This evolution of the individual from the mass has been taking place for many years in Mauritius. With a civic status equal to that of other members of the community; with free education, and with equal legal and social rights, the labourer is perfectly free to evolve, as an individual, and, *as an individual he has evolved;* there is surely no need to supply evidence to show that within the restricted limits of this island's activities, the labourer and his descendants have moved up into every sphere; viz, as landowner, house owner, planter, artisan, tradesman, clerk, agent, civil servant, and in fact, in every sphere, professional, private and public.

We submit, however, that while the evolution of the individual has been entirely unrestricted in this Colony, where, on the contrary, every opportunity has been afforded to, or been taken by, the individual, to improve his status, the condition of the mass, in the aggregate, must remain subordinate to economic laws which are inexorable, over which we can have no kind of control, and for the existence of which, surely,

neither the Sugar industry, nor the Goverment, nor anybody else, can be held responsible.

There is, unfortunately, a marked tendency on the part of certain apologists of the recent unrest, to confuse a grievance with a legitimate aspiration ; the line of demarcation is often consciously or unconsciously blurred, and the fact is invariably overlooked that in all classes of the community, in all parts of the world, there are aspirations towards a better state, which may never be realised, but which do not, necessarily, constitute grievances demanding redress.

So long as the production of a primary agricultural product, whether that product happens to be Sugar or any other, is necessary for the maintenance of economic life in this Colony, and so long as agricultural labour, in the mass, is necessary for the work involved in production of that product, the general circumstances of life, on the whole, in those territories, where the same primary agricultural product is being produced under similar market conditions, with due allowance for the incidence of special advantages or disavantages, geographic, climatic, fiscal, political, etc.

We challenge the element which is now agitating for higher wages for the labour mass, and for an improvement in the condition of that mass, to establish in a definite manner that the economic conditions prevailing at present in Mauritius are such that our primary industry can afford to create better circumtances for labour than those ruling in the territories on the same level.

The onus of proof must rest on those who agitate, or on the mass in whose name the present agitation is being carried on.

We submit that any agitation which does not take into account the fundamental circumstances to which we refer, is narrow, and subversive ; that agitation which is based on purely outward and visible factors is irresponsible and fruitless, and can only damage the economic fabric ; that agitation which clamours for the removal of a hardship alleged to be peculiar to Mauritius, but assumed as prevailing in an industry whose local conditions depend on world factors, is either entirely ignorant or purposely misleading.

Having outlined this general perspective in which we consider it essential that our Sugar Industry and the labour population dependent upon it should be brought, we will endeavour to deal with the various issues that have been raised in the recent unrest.

II

LIVING WAGE CONSIDERATION

In the opening paragraph of the first chapter of this Memorandum we indicated that the evidence submitted by labour witnesses seemed to raise two main issues :

a) Are labourers of this Colony in receipt of a living wage under present conditions ?

b) Is the Sugar Industry in a position to increase those wages ?

We have submitted that both these issues must be considered in a

general perspective ; that they are governed by a prevailing world condition, which circumscribes the status of a labouring population engaged in such an industry as Colonial Sugar, and establishes inexorable limits to the elements that constitute a living wage ; we submitted that the constitution of a living wage was a matter open to very elastic interpretation ; that no authority could lay down a hard and fast rule as to what particular elements, vital or accessory, should go towards constituting the desired level.

In view of these considerations, we cannot do otherwise but refrain from any attempt to establish what we consider to be a living wage. Inasmuch as no two individuals would be in complete accord as to what should be allowed for accessory as well as essential needs, it could serve no useful purpose to submit a view, " ex cathedra ", on this point. In any endeavour to fix a computed figure, every variety of principle would come into play, and the conflict of opinion in the matter of essentials, degrees, standards, aspirations, etc., would make agreement impossible.

We can hardly find a better illustration of this difficulty than in the evidence submitted by the various labour witnesses before the Commission. The evidence reveals that the very labourers who live the life of a local labourer are not agreed as to what his wages should be to enable him to afford that living wage he is understood to require.

We, of course, realise that we could not expect such witnesses to be in agreement, but the fact that they themselves disagree illustrates the difficulty.

A further example of the futility of attempting to establish a figure is to be found in the evidence of Dr. M. Curé, who submitted his view before the Commission.

Speaking in his capacity as President of the local Labour Party, and therefore as an individual whom we must assume to have some sense of responsible deposition, Dr. Curé declared that he had given considerable thought to the question of a living wage ; that he had worked out the requirements of an average labourer ; he said that he thought that the labourer should receive a wage of Rs. 3 per day during the Crop season ; further questioned, Dr. Curé gave it as his considered view that the minimum wage on which a labourer could live, to ensure his being able to afford what he (Dr. Curé) considered to be essential requirements, should be Rs. 1.60 per day on an average the whole year round ; he ended by agreeing that if the labourer were given a wage equivalent to Rs. 45 per month he would be able to carry on.

A mere summing up of the number of *adult male labourers alone*, registered as being employed in the Sugar Industry, only, would give us, according to official statistics, the figure of 58,000 : the real, actual number of workers, who, in fairness, would be entitled to receive what Dr. Curé considers a reasonable wage, is of course very much more.

For the purposes of our illustration we accept the figure of 58,000 ; if the average monthly wage throughout the year is to be equivalent to Rs. 45., this would give us Rs. 540. per annum, and a total of over 30 million rupees.

We need hardly point out that this represents approximately the average value for the last 5 years of our Total Sugar production, and it

is un-necessary to add that the living wage which Dr. Curé, an important witness, has specified, after careful computation, is, under the circumstances, a grotesque enunciation.

Quite apart from the extent of Dr. Curé's irresponsibility on this crucial issue, the above comparison reveals the inexorable limits which circumscribe our Sugar Industry under present conditions, and, to come back to our point, it illustrates the futility of any attempt to fix the precise level of a living wage for labour, even if we accept the view that the actual level of wages does not represent a living wage (a view which is by no means established and which we are not prepared to admit).

In conclusion we would say that, apart from further issues we propose to raise in this Memorandum on the comparative treatment of labour, past and present, and which, indirectly, may bear on the living wage question, we must refrain from laying down a figure, if only for the final reason that whatever figure we specify as feasible and reasonable, is not likely to find favour with labour, judging by the views expressed before the Commission by those who purport to represent labour at present, and who will no doubt continue to ventilate their alleged grievances, and support irresponsible agitation in the future.

III

CAPACITY OF SUGAR INDUSTRY TO RAISE LEVEL OF WAGES

We submit that the capacity of the Mauritius Sugar Industry, as a whole, to raise the level of wages, cannot be determined in an entirely satisfactory manner, as no hard and fast rule can be adopted for such determination.

It is no doubt possible for any particular Estate to ascertain whether it is in a position, in *any given period*, under *given conditions* of output and price, to pay a certain level of labour wages :

The proposition is entirely different when the investigation endeavours to cover the whole industry, with the widely differing conditions prevailing in each district, with the field and factory efficiency of each Estate on a different basis and with the potential capacity to pay more or less varying considerably from one Estate to another.

Such an investigation woud have to consider all kinds of issues, and cover the whole range of existing contingencies.

In the course of the recent unrest, we have frequently heard the question raised :

Can the Sugar Industry afford to pay more in the way of labour wages ?

Unfortunately such questions invariably overlook an essential precision, without which no satisfactory reply can be forthcoming.

The whole history of the Industry, and more specially, the experience of the last 5 years, show us that each season has an entirely different output and appreciably different price level. It does not seem of much use to assess the capacity of the Industry to pay a given price for labour, when, owing to the narrow margin on which the Industry is known to

operate, the question of output and price, which is of primary importance, varies from year to year.

In the first place it is surely of interest to point out that up to a few months ago, before this unrest manifested itself, the mere suggestion that any proposition was being considered of adding a further burden on the Sugar Industry would have shocked, not only the interests concerned and all those, in this Colony as well as in other Sugar producing Colonies of the Empire, who are aware of the facts, but also those Colonial Governments who depend more or less entirely on the resources of the Industry, and, in particular, the Colonial Office, where the competent authorities are keenly aware of the dire straits to which this essential Colonial industry has been reduced.

A few months ago it would have been considered preposterous, in the view of all who are competent to frame an opinon, to put forward any kind of proposition which tended to suggest any form of additional charge on the Sugar Industry.

Such a suggestion would be in radical contradiction to all official views on the subject, and clearly opposed to the general trend of policy followed by the Imperial Government in regard to the Sugar Colonies.

This cannot be denied; it is an established fact.

However, the position we now have to deal with, is that the issue has been raised and the suggestion made that an additional burden can be placed on the Industry.

In the normal course of events such a suggestion would not have been considered worth refuting; it would, in fact, have been turned down as ridiculous.

At this juncture, we are not prepared to discuss the causes which led to this suggestion, but the issue has been raised by the mere fact that large numbers of people in this Colony have been induced to believe that this additional burden can be afforded.

The question certainly does not lack an element of bitter irony when it is considered that this sudden view of the financial capacity of the Industry has been put forward in all seriousness by individuals who are obviously lacking in the most elementary notions of how this subject ought to be approached.

Whether we take the view that the question has been raised by agitation, by suggestion, by the natural desire of the workers to gain their ends, by intimidation, or by any other causes, it is perfectly evident that those who have come forward to say that the Sugar Industry is in a position to raise the level of wages, are all, without exception, entirely and notoriously incompetent to frame any opinion at all.

We will try to outline the position in its proper perspective, and endeavour to marshall the facts and show the real situation of affairs.

IV

CONDITIONS, PAST AND PRESENT

The history of the Colonial Sugar Industry during the last 10 or 12 years is a depressing story of collapsing market prices, followed by disastrous consequences to the economic fabric in the Sugar producing Colonies who are dependent on the industry for their livelihood and welfare.

It is hardly necessary to recapitulate the whole history of those past events, which led to frequent and ceaseless endeavours by Sugar interests in this Colony and all over the Colonial Empire to save their vital industry from the appalling consequences which collapse would have entailed, and which the desperate condition of the world market was threatening inexorably.

The following brief statement of the approximate average selling price for Mauritius Sugar from 1924 up to date reveals the position at a glance :— (Prices are those actually received by Producers here).

	PER 0/00 KILOS		PER 0/00 KILOS
1923-24 ...	Rs. 383.	1930-31 ...	Rs. 120.8
1924-25 ...	260.	1931-32 ...	130.2
1925-26 ...	186.	1932-33 ...	123.8
1926-27 ...	216.	1933-34 ...	121.2
1927-28 ...	192.	1934-35 ...	121.0
1928-29 ...	173.	1935-36 ...	113.8
1929-30 ...	148.	1936-37 ...	109.2

On various occasions during the period covered by the above statement, the Home Government, impressed, by the urgent need for assistance or relief to the hard pressed producers in the Sugar Colonies, readjusted the scale of duties in the United Kingdom, and, as was the case in 1932, elaborated a quota arrangement to supply some form of direct subsidy to Colonial Sugar.

The continued drop in market prices, however, was unremitting and unrelieved, and, as may be seen from the above prices, the market, notwithstanding the increased measure of fiscal assistance given in 1932, reached still lower levels, and for the last 6 years has been ranging, with depressing persistency, between Rs. 5.50 and Rs. 6.25 per 50 kilos, a price level, which is, by a considerable margin, *the lowest ever registered in the annals of the Industry*, even if we go back to the days, three centuries ago, when sugar was first introduced in the marts of the world, as a commodity for human consumption.

In 1929, when conditions in the Colonial Sugar Industry had reached a stage which was critical in the extreme, and the Sugar producing Colonies in the Empire were on the verge of serious economic disaster, the British Government initiated a measure which is a land-mark in the history of this period.

It was decided that a thorough and complete investigation would be undertaken by visiting Commissions of Inquiry, appointed by the Secretary of State for the Colonies, to be undertaken, on the spot, in those Colonies that were largely or entirely dependent on the production of Sugar for their economic life.

The following Commissioners were appointed :

(1) Lord Olivier, P.C., K.C.M.G., — Chairman.
Mr. D. M. Semple.
Mr. Sydney Caine (Colonial Office) — Secretary.
to inquire in the West Indies and British Guiana.

(2) Sir Francis Watts, K.C.M.G., D. Sc.,
Mr. F. R. Roberts (Colonial Audit Service) — Secretary.
to inquire in Mauritius.

Their Reports, which followed exhaustive investigation into the condition of the Sugar Industry, were entirely in agreement in principle.

It was found, in the West Indies and in Mauritius, *that Sugar was being produced at a loss,* and that immediate measures would have to be taken by His Majesty's Government to save the Industry in those Colonies.

It is interesting to point out that the average price of Sugar in 1928/29, i.e. the year immediately preceding that during which the Reports of the West Indian and Mauritius Sugar Commissions were made, was equivalent to Rs. 170 per ton (or Rs 8.50 per 50 kilos).

These two Reports, especially that of the West Indian Commission, embody the most complete examination of the situation in the Sugar Colonies held in recent years.

Lord Olivier was a prominent member of the British Socialist Party, and the Socialist Government was in Office at the time, with Lord Passfield at the Colonial Office. It cannot therefore be urged that either the Government in Office or Lord Olivier was unduly influenced by considerations in favour of vested agricultural or industrial interests in the Colonies.

The recommendation of Lord Olivier for the creation of an Import Board in London with a guaranteed price of £ 15. per ton, and the recommendation of Sir Francis Watts for a grant-in-aid for 5 years were not accepted by the British Government, but the Reports were unanimously recognised as a true and accurate reflection of the situation, and have never been challenged or questioned in any way.

Following these Reports the British Government issued a Statement of Policy, which was presented by the Secretary of State for the Colonies to Parliament. (Vide Statement S. of S. March 1930).

In this Statement the Socialist Government accepted the Reports with sympathy and consideration, and advised the House of Commons of the steps taken by the Government to meet the situation in the Colonies. They pointed out that the recommendations made in the Reports would require the community in the United Kingdom to contribute several millions of pounds a year to the Sugar industries in the Colonies concerned, and that the Government was not prepared to ask Parliament to impose on the community a burden of this magnitude. His Majesty's Government added that they had already shown their sympathy with the Sugar producers in the Colonies by the offer which they had just made to associate themselves with the Colonial Governments concerned in bearing a portion of the loss that may be incurred in financing the cultivation of the coming crop ; further, that detailed suggestions for improvements in the industry would be sympathetically considered, and in particular His Majesty's Government would be prepared to examine how far any, or all, of the measures indicated in the Reports could be assisted under the Colonial Development Act.

We beg to refer to these two Reports, both submitting unquestionable proof, supported by the strongest and most authoritative evidence, that in 1928/29, when Sugar was selling (in the case of Mauritius) on a level of Rs. 8.50 per 50 kilos, *it was being produced at a loss.*

The findings of these Commissions cannot be denied; they were accepted by the Colonial Governments concerned, by the Colonial Office, and by Parliament, as correct and irrefutable.

We now come to the last phase of the history of events we have endeavoured to briefly outline.

What has occurred since 1930 is unfortunately too well known.

The market price of Sugar continued falling, and in 1931 reached the then unprecedented low level of Rs. 6 per 50 kilos.

In the Budget of the British Government of April 1932 an increase of the preference amounting to 1/— per cwt was granted, and a further 1/— per cwt was given on a prescribed quantity of Colonial Sugar.

Notwithstanding this very welcome assistance, the price of Sugar continued falling, and in 1936 (last year) it reached rock-bottom, with the disastrous price of Rs. 5.50 as the general average selling price for the 1936/37 Crop.

This price of Rs. 5.50 represents about Rs. 3 per 50 kilos or Rs. 60 per ton less than the ruling general level on which the 1930 Commissions reported that the Sugar Colonies were producing at a loss.

As regards the present Crop, the price has improved slightly as compared with the rock-bottom of last season, and an average price of Rs. 6.30 per 50 kilos has been secured, on the Sugar sold so far, *although the present price* (November 1937) *is not more than Rs. 6.00.*

The two salient points we wish to stress are the following :

(1) In 1928/29 it was satisfactorily proved, and the facts accepted by all authorities concerned, Colonial Governments, Colonial Office, Parliament, etc., and neither denied nor challenged by any responsible person, that colonial producers including producers in Mauritius, *were producing at a loss,* with an average price standing at Rs. 8.50 *per 50 kilos.*

(2) In 1936 and 1937, the price of Sugar is ranging between Rs. 5.50 and Rs. 6.30.

The obvious question arises : How has the Sugar Industry of Mauritius survived this period ? and what are the factors that have enabled it to carry on in such a condition of affairs ?

It is evident that the explanation lies in the fact that Costs of Production have been considerably reduced.

This cannot be denied.

In view of the position we have outlined above, it will be appreciated, without difficulty, that had it not been for the fact that the Sugar Industry was able to reduce costs of production, a state of collapse would have ensued, complete ruin would have encompassed the interests involved, the whole machinery of Government would have been paralysed, and so far as the labouring population dependent on the industry is concerned, the consequences for them would have been too appalling to contemplate.

This is too evident to require further stressing, but it is precisely the situation which both the West Indian and the Mauritius Sugar Commissions of 1930 prophesied in the strongest terms, as impending, in the event of the price of Sugar *dropping below what it then was.*

Visualising the possibility of the Labour Government of 1930 withdrawing the preference of 3/8. 8 d. per cwt existing at the time, both

Lord Olivier and Sir Francis Watts confirm in unmistakable terms the following consequences amongst others :— " There will be no fresh cultivation or planting of Sugar, and practically entire West Indian production of Export Sugar will, after 1931 Crop already planted, rapidly disappear " ; " Effects disastrous to Labour, Capital, and local Government " ; " Heavy liability for repatriation of Indians " ; " Ancient British Colonies would receive destructive shock, etc., etc., which we would consider it impossible for any British Government to be a party to bringing about ".

" If the Sugar Industry should collapse as it must do if the preference is removed ". Etc., etc.

" We have already discussed, in relation to Barbados, the problem which would arise, of feeding the population in the event of a complete extinction of the Sugar Industry, such as must, in our opinion, result from a sudden removal of the preference ".

(Vide Report of West Indian Sugar Commission 1930).

" As a result of my inquiry I am convinced that the Sugar Industry of the Colony, generally speaking, is carried on at a loss in existing conditions ".

" Without the degree of protection derived from the present Customs Tariff (1929) in the United Kingdom and Canada, the Sugar Industry of Mauritius and of other British Colonies would immediately collapse, entailing the loss of considerable capital involved in the cultivation and manufacture, the loss of employment of all those employed in this industry, and the complete ruin which would follow inevitably — consequences too appalling to contemplate ".

(Vide Report of Mauritius Sugar Commission 1930)

The above alarming contingencies were expressed as representing, in the view of the Commissioners, the effects of a continuance of the then existing situation, and the effects resulting from the threatened withdrawal of the Sugar preference.

As mentioned above the Sugar Preference was then on the basis of 3/8.8d. per cwt. The withdrawal of the preference would have involved a drop in the market price *of an equivalent amount.*

It is evident that the 1930 Sugar Commissioners were extremely apprehensive of the consequences of such an enormous decrease in the market price ; they had no hesitation whatever in apprising His Majesty's Government of the impending collapse of the Sugar Industry in the West Indies and in Mauritius, with resultant ruin, economic disaster, social calamity and appalling distress.

As we have shown above, this enormous decrease in the market price *has come about.* The average price of Rs. 8.50 in 1928/29 has dropped to Rs. 6.30 in 1937 and Rs. 5.60 in 1936, the average drop representing a mean equivalent to 3/8.8d. It cannot be challenged therefore that the Sugar Industry of Mauritius would have been doomed had it not been possible to *reduce costs of production.*

It was necessary, vital and essential, for the existence of the Government, for the survival of economic life, and for the salvation of the population itself, as well as for the industry, that costs should be reduced.

This is the issue we have now to deal with : *In what manner were these costs of Production reduced ?*

It is established, accepted, and unquestionable that the Sugar Industry of Mauritius was operating at a loss in 1928/29, when the average price ruling was Rs. 8.50 per 50 kilos.

The price for the last 12 months has been ranging between Rs. 5.50 and Rs. 6.30.

At first sight it would *appear* that this vital reduction in the Costs of Production has been achieved mainly by means of drastic cuts in the salaries of the personnel and in the wages of labour.

We will endeavour to establish that such a view of the situation is essentially false and unfair, is not justified by the facts; that it represents a view far too easily and lightly arrived at, and that it is entirely misleading.

V

REDUCTION OF COSTS OF PRODUCTION

Labour witnesses and others have submitted to the Commission views that tend to suggest, and in some cases deliberately suggest that the reduction of Costs of Production in the Sugar Industry has been achieved mainly by drastic cuts in labour wages.

The suggestion is propounded that it is indeed largely owing to the penalisation of labour that the Industry has managed to survive the unprecedented drop in Sugar prices.

We would like to point out, in the first place, that the witnesses referred to are not in a position to support their views by facts of any kind.

They are aware that wages for day labourers have fluctuated from time to time and been readjusted from the level of more prosperous days, and, though the promptings of open and surreptitious agitation, this suggestion has developed into a trite parrot-cry.

The idea that the industry has managed to carry on at the expense of labour has been broadcasted high and low. It is no doubt sincerely believed by many labourers, who are not in a position to differentiate in a matter of cost factors, and we have reason to believe that this view has been accepted in some quarters without question.

We have established that it was essential that Costs of Production should be reduced ; that if the Industry was working at a loss when Sugar was at a level of Rs. 8.50 per 50 kilos, its complete extinction would have followed when prices gradually dropped to less than Rs. 6.00, had costs not been reduced.

As Labour charges involve by far the heaviest single item in the costs of production of Sugar, it was to be expected, and it would have been perfectly natural that labour should contribute its quota to the general decrease of costs which it was considered essential to bring about.

We contend, however, that *it is far from the truth* to assume, as is too lightly done, that the Sugar Industry has carried on at the expense of labour.

We propose to establish beyond question :

(1) That the decisive factors which have enabled the Industry to carry on had very little to do with Labour.

(2) That the contribution of Labour to the general decrease in costs of production was unimportant as compared with the operation of other factors.

The following are the principal factors which have enabled the Sugar Industry *to carry on* and *to reduce its costs of production* since the Reports of the Sugar Commissions of 1929 :

(1) Financial assistance in the form of Loans in 1929, 1930 and 1931, to enable the Industry to carry on.
(2) Advances by local Government in 1934 to Banks to enable them to finance the Crop to tide over difficulties.
(3) Cancellation by Government of all the Export Duties levied for Revenue purposes.
(4) Reduction in Storage and Handling charges in Port-Louis, especially the charges of the Dock Companies, Reduction of Transport and Shipping Costs, including freight, between 1930 and 1935.
(5) General reduction in costs of imported commodities since 1929, especially in the price of the principal commodities required by the Estates.
(6) Curtailment of provision for renewals of plant ; depreciation, etc...
(7) Exceptional climatic conditions during 1935, 1936 and 1937, enabling record outputs, which considerably reduced the cost per ton.
(8) Extension and distribution of new varieties of cane, producing increased yields in field and factory, thus reducing costs per ton.
(9) Readjustment in salaries of Estate Staffs and artisans, and in labour wages generally.

VI

EXAMINATION OF COST FACTORS

We will endeavour to analyse the bearing of the above factors on the question of costs of production, and show that the combined effect of all of them, operating consecutively or simultaneously, has been instrumental in allowing the Industry *to carry on* after the critical period of 1930, and in enabling producers to *reduce their costs of Production* to meet the exigencies of the situation brought about by the further and aggravated fall in market prices.

Financial assistance :

In the list of principal factors we have outlined above, the first two represent temporary assistance afforded to the Industry under instructions from and sanctioned by the Imperial Government.

These advances of funds or loans evidently cannot be classified as factors contributing to the reduction of costs of production, but as factors which enabled the Industry to tide over critical periods ; inadequate as they were considered to be at the time, they served to restore some degree of confidence, to finance essential agricultural operations and generally speaking to keep the Industry going.

These advances of funds or loans supplemented the deficiencies of price, and on the whole helped to bridge part of the gap existing at the time between market prices and costs of production. As market prices collapsed more rapidly than costs of production could be brought down,

such assistance as these advances supplied were extremely welcome ; in effect they very probably saved the situation, pending the prospect of other factors intervening in the form of deliberate recourse to well-planned reduction, and of fortuitous and providential circumstances such as reduced costs of requirements and favourable climatic and agricultural conditions.

Export Duty Cancellation :

Apart from special export duties levied for specific purposes, such as duties in reimbursement of loans, or small duties of which the proceeds are earmarked for such special accounts as the Sugar Industry Reserve Fund, The College of Agriculture, the Phytalus Smithi campaign, there were up to some years ago two Revenue Duties levied on Sugar :

(1) An Export Duty of 30 cents per 100 kilos levied since 1875 as a contribution to the General Revenue of the Colony.

(2) An Export Duty of R. 1 per 100 kilos levied since 1920 to supply funds for the creation of the Mauritius Development Fund.

The Export Duty of R. 1 per 100 kilos was definitely cancelled in 1927, and the Duty of 30 cents was repealed in 1931.

The Export Duties for refund of loans and for special funds are, of course, still bearing on the Industry but these represent either reimbursement of financial assistance already received, or payment for services considered essential to the welfare of the Industry.

The repeal of the Revenue Duties was certainly an appreciable relief to the Industry, as it is evident that sugar could not be expected to carry these burdens at present ruling prices.

Reduction in handling and storage charges in Port Louis ;

Dock Company rates ; *Transport and shipping charges* ;

Freight :

Reductions under this heading are, in the first place, a reduction of storage and handing charges by the Dock Companies. Between 1930 and 1936 the rate was reduced from 14 cents to 9 cents per 50 kilos.

Although Stevedoring rates and Freight charges fall directly on the buyers, they affect the price which the latter can offer for Mauritius Sugar. Stevedoring rates were reduced from Rs. 1.25 to R. 1 per ton in 1934, and freight rates which were approximatively 25/— per ton in 1929 gradually dropped in the ensuing period to the very low rates of 17/6 and 18/— in 1935. As is known, freight rates started increasing in 1936, and are now at a very high level again.

On the whole, it would seem that between 1929 and 1935, the reduction in freight rates, stevedoring, handling, Dock storage, etc., reduced the margin between selling price and cost price of sugar by about 30 cents — a very welcome relief in view of the disastrous fall in market prices.

General reduction in cost of commodities and supplies required by the Industry :

The reduction of costs of production brought about by factors falling under this heading was of great importance.

The rapid fall in sugar prices between 1930 and 1935 synchronised with a fall in the price of goods and supplies required by the Industry ;

this represents a factor in a series of for tuitous circumstances which were certainly providential for the Colony, as the effect on the cost of production was considerable.

As the world depression in the price of primary products reached a peak in 1930 and 1931, the same general causes which brought down the price of sugar affected the price of commodities and manufactured articles. The result was that the Industry was able to procure its requirements for field and factory at greatly reduced prices.

Between 1929 and 1935 the decline in the cost of the following articles required by the Sugar Estates was very considerable :

Chemical fertilizers ; Grain for Rations ; Coal, Coke and Patent Fuel ; Gunnies ; Hardware.

Fertilizers :

The fall in the price of Chemical Fertilizers can be gauged when it is considered that in 1928 the CIF value of 13,525 tons imported into the Colony was Rs. 2,342,595, whereas in 1935, 15,585 tons were imported at a CIF value of only Rs. 1,754,425, i.e., an economy of Rs. 589,170, and a real proportionate economy of approximately one million Rupees on this item alone.

In the case of fertilizers, not only was the reduced cost instrumental in bringing down the cost of production on the price factor alone, but the cheapness of the article enabled producers to utilize larger quantities, thus increasing yields in the fields and further reducing costs on the yield per acre ratio.

Grain :

The price of imported grain fell rapidly between 1929 and 1936, and consequently the expenditure of the Estates in rations was considerably curtailed. The price of Ration Rice dropped from an average of Rs. 15.00 per bag to Rs. 8.50

Between 1929 and 1936 the value of imported Rice, according to Customs returns, dropped from Rs. 11,207,742 to Rs. 6,035,134 for approximately the same quantity imported. When it is considered that about 5,000 tons are purchased by the Estates for rations, it will be seen that the economy on this item alone for the Industry was somewhere in the neighbourhood of Rs. 430,000 out of a total economy for the Colony of over 5 million Rupees.

Coal, Coke, and Manufactured Fuel.

The decrease in the price of this item was considerable ; the extent of this drop can be realised by a comparison of the CIF value as shown in the customs returns. In 1928, imports of 40,000 tons of coal cost the Colony Rs. 909,000 and in 1936, the same quantity imported (40,000 tons) cost only Rs. 463,000.

In regard to Coke and Manufactured Fuel, the proportionate decrease was even greater. In 1930, imports of 6,000 tons cost Rs. 300,000, and in 1935 imports of 6,400 tons cost only Rs. 145,000.

The economy realised by the Colony on these items, during the period under review, would average at least Rs. 600,000,— and a very considerable proportion of this economy went to the Sugar Industry as the item fuel in the factory and in field locomotives is important.

Gunnies.

The economy for the industry under this item was very considerable. For the same number of gunnies imported in 1929 and 1935, the costs were Rs. 1,910,000 and Rs. 974,000 respectively, representing an economy on this important item alone of about *one million rupees.*

Hardware & Miscellaneous.

It is practically impossible to assess the approximate economy under this heading during the period under review, as it covers an infinite variety of requirements of the Industry. However, when we consider that Estate supplies cover practically every item of Hardware and ironmongery, metals and mechanical goods of all kinds, and that the cost of these articles all registered considerable decrease between 1929 and 1936, some idea of the economy under this heading can be realised.

In endeavouring to assess the probable economy to the Industry of all the essential requirements enumerated above during the period 1929 to 1936, we have established our estimates on Customs returns, by comparing, whenever possible, returns of those years when the quantities imported were about the same. The discrepancies in values are so striking, that even allowing for a possible margin of relative error, the general decrease revealed is so great that there can be no question of the definite advantage reaped by the Industry. The effect on the cost of production must necessarily have been very considerable.

It was indeed providential that, at precisely the period when the Industry was desperately trying to adjust its cost of production to market prices, it should have been favoured by the coincident decrease in the cost of its essential supplies.

The reduced cost of Estate requirements, supplemented by the various forms of relief indicated under the previous headings, certainly constituted a powerful factor in providing the Industry with the means of carrying on, and, what was even more important, of readjusting its costs of production so as to obviate the disaster threatened by the state of the market.

Before we deal with the next factor in the list of those causes that have enabled the Industry to survive, so far, we feel it will be agreed that we have already gone a long way towards exploding the fallacious and absurd theory that the Sugar Industry has managed to carry on and reduce its costs of production, at the expense of labour.

We have a good deal more to say about even more important contributory causes, to which those who have endeavoured to picture labour as having been victimised in the general cost readjustment, have invariably been careful not to refer in the course of their campaign.

Compression of Expenditure on plant renewal ; Depreciation provision, etc.

Reduction of expenditure falling under the above general heading contributed, in an appreciable measure, to the readjustment of costs of production.

We do not wish to assess an undue bearing to this factor, and do not propose to put down any estimate of their general effect on costs of production, but we will outline the various directions in which economies were undertaken, or made feasible by circumstances.

The item " Renewal of Plant ", repairs, improvement and upkeep, has a very wide range, and inasmuch as, unlike good wine, estate and factory equipment do not improve with age, such expenditure is considered more or less essential.

There is not the slightest doubt that during the period 1929 to 1935 Estate Companies have had to exercise their wits, in the absence of funds, to keep down maintenance costs to a minimum figure. While it is probable that none of the factories have been definitely neglected, it is no secret that the majority of Estates found themselves compelled to put off to better days the installation of new plant, and in other cases were forced to adopt the expedient of make-shift equipment to suit the state of their exchequer.

During the last seven or eight years, plant doing duty long beyond its normal span of life, has been a common sight in practically all the factories of Mauritius; as necessity is the mother of invention, recourse to expedient had to be cultivated as a science, and estate Managers and Overseers became experts in the art of " making bricks without straw ", their value, in the eyes of their employers, going up in proportion to their inventiveness in the elaboration of practical contrivances.

Indeed, to such an extent has curtailment of cost been resorted to in regard to plant and equipment during all these years of depression, that whenever, if ever, economic conditions improve substantially, the Industry will certainly have to invest a good deal *of its eventual profits* in the acquisition of new equipment, not only to remedy the wear and tear of the last decade, but to bring its plant to the up-to-date standard which all competitive industries, sooner or later, must attain.

The provision for depreciation, as is known, has had to be expunged from the Industry's Balance Sheets, as a luxury it could not afford to indulge in. The fact need not be concealed ; it is common knowledge that very few Estate Companies have found it possible to set off any provision for regular yearly depreciation of assets, as they ought to have done.

It will thus be seen that the factors falling under this heading, and which a leading authority on the Colonial Sugar Industry once referred to as " imprudent economies ", contributed their full quota to the general reduction of costs of production which enabled the Industry to carry on, and keep afloat.

We now come to the next 2 factors, (which we have purposely grouped together) and which contributed to the greatest extent, by far, to that lowering of costs which is known to have materialized, but which has been falsely represented as having been obtained at the expense of labour.

Climatic conditions in 1935, 1936 and 1937 ;
Influence of new varieties of cane :

We are grouping these two factors together, as it is practically impossible to assess the separate influence of each on the reduction of costs of production. It is generally recognized that in view of the abnormally fine weather conditions obtaining in 1935, 1936 and 1937 no accurate estimate can be made of what the influence of the new cane varieties would have been under normal conditions.

So far as actual increased yields are concerned it is estimated that

the high yielding varieties of which the influence was felt from 1935 onwards, accounted for *an additional* outturn for the Industry of between 15,000 and 20,000 tons of sugar for the 1935 and 1936 seasons respectively.

The output for 1935 was 280,000 and for 1936, 300,000 tons. Inasmuch as the quinquennial averages of production before 1935 had never reached 230,000 tons, it would appear that the 1935 and 1936 seasons exceeded the level which up to then had been considered an average, by 50,000 and 70,000 tons of sugar respectively.

Extraordinarily favourable climatic conditions, rainfall, temperature and atmospheric incidence operating simultaneously, the increased yield of newly introduced cane varieties, the more generous use of fertilizers made possible by the cheapness of the article, the whole combining in exceptional synchronisation, resulted in a sequence of three harvests unprecedented in the annals of the Industry, and, as an inevitable consequence, in an extremely considerable curtailment of costs of production.

Of all the factors enumerated in our list of causes having contributed to the general decrease of costs of production since 1930, it is evident to all that the most important is the one now under review. To this factor, which is partly in the nature of a providential and partly in the nature of a fortuitous circumstance we would attribute the largest effect on the low cost of production *at present* prevailing. We do not believe this can be seriously gainsaid.

We propose to deal in due course with the providential aspect of this factor as compared with those that may be classed as permanent.

In order that some idea may be had of the effect of a large output on costs of production, or, inversely, of the effect of a poor output, we cannot do better than refer to a statement of costs of production specially prepared for the Mauritius Sugar Industry Conference initiated by Sir Herbert Read in 1927.

In the appendix attached to the proceedings of this Conference the actual results obtained in both field and factory with a large output and a small output are compared. Every detail of costs is worked out and the complete analysis of each item is outlined.

The result is as follows :

	POOR SEASON	GOOD SEASON
Output of Cane on Specimen Estate ...	31,657 tons	46,328 tons
Output of Sugar in Specimen Factory	3,017 tons	4,627 tons
Field cost per ton of cane	Rs. 20.32	Rs. 13.79
Factory cost per 50 kilos Sugar ...	Rs. 4.12	Rs. 3.05
Total costs of production (ex factory).	Rs. 14.78	Rs. 9.95
Specimen Season	1926/27	1925/26
Total production of Colony	192,000 tons	241,200 tons

A dissertation on the above comparative returns would be superfluous ; the figures by themselves have an eloquence which we could not hope to equal. With all due allowance for margins of error or for the existence of particular circumstances, etc., it is certainly interesting to compare those figures of costs, and to realise the enormous difference which can result from the harvesting of a poor crop and the harvesting of a large one ; we could, moreover, point out that the statement we refer to

was not specially prepared from an extreme case " pour les besoins de la cause ", but was merely a statement taken from actual costings as a document to be utilised at the 1927 Conference, and illustrating specimen results obtained on one Estate during two consecutive seasons.

These results only serve to demonstrate in forcible manner the extent to which costs of production can be brought down when a harvest is abundant ; a glance at these figures enables us to visualise the extraordinary difference which three successive record outputs, such as the Colony has just experienced, can make in this question of cost, and gives us a good idea of the determinative effect of this factor above all others, important as these others may be in themselves.

When we consider what this purely fortunate series of years has meant to the Sugar Industry of Mauritius, it is not difficult to realise that whatever may be the estimated cost of production prevailing at present, whether it happens to be Rs. 5 per 50 kilos ex factory, Rs. 5.25 or Rs. 5.50 or any other hypothetic figure, the figure such as it is believed to be, is of no value at all as a guide for the future, inasmuch as it has been brought about by determinants which are essentially transitory, by decisive factors that are wholly fortuitous and temporary.

The removal of these factors, or the abstraction of their influence on future cond tions would obviously cause costs of production to soar up to a higher plane altogether, and *it is this dangerous feature of our present situation* that we propose to deal with in due course.

We will now consider the last factor mentioned in our list and briefly examine its influence, in a relative sense, on the general reduction in costs of production in recent years.

Readjustment of Salaries of Estates Staffs and Artisans, and of Labour Wages.

We feel we have sufficiently demonstrated that the suggestion made by various important witnesses before the Commission to the effect that costs of production have been reduced at the expense of Labour, is an absurd postulate, based on false premises, voiced by irresponsible persons or by those whose objects, political or otherwise, are served by popular belief in this theory.

That the general level of wages has been from time to time readjusted to the precarious conditions prevailing in the Industry from 1929, onwards, owing to the unprecedented fall in market prices, is admitted and recognised.

It is difficult if not impossible to establish a fixed and definite figure to represent the average wage paid to the labourer at present, in view of the differences existing in different districts, at different seasons, for different classes of workers, and for different tasks, etc.

We submit that the general level of wages at different times had temporarily fluctuated, proportionately to the ups and downs of the Industry. In the majority of cases, this level, prior to the recent unrest, had been readjusted, more or less to normal : if we endeavour to assess the influence of the wage readjustments of recent years, we are bound to conclude that while they have undoubtedly been contributory, they have

not, relatively speaking, been an effective factor, and even less have they been decisive, in their effect on cost of production.

Successful misrepresentation in this matter of labour wages and their influence on costs, is largely due to the inclination of most people to consider outward and visible signs, to accept pseudo-truths and verisimilitudes on their face value, and to take short-cuts to conclusions.

The real unquestionable truth is that the Sugar Industry has maintained itself in the face of an unprecedented market collapse, owing to the intervention of factors which were in the form, as we have shown above, of fortuitous and providential circumstances, supplemented by other minor causes, such as a general relevelling of costs, in which a readjustment of the salaries of employees and of labour wages was involved to an unimportant extent.

VII

COST OF PRODUCTION IN THE IMMEDIATE FUTURE

The question of costs of production in the immediate future and of the condition and capacity of the Sugar Industry in the years ahead of us, is evidently the most important issue we have to consider.

We have endeavoured to analyse the situation in the immediate past, to outline the march of events during the last 6 or 7 years, i.e., from the period when authoritative Reports, prepared after exhaustive surveys had been carried out, had demonstrated with complete facts and figures, that the Colonial Sugar Industry, including the industry in Mauritius, was producing at a loss.

We have shown that these Reports had been accepted by all the interests involved, by the Colonial Governments concerned, by the Colonial Office, by Parliament, by all authorities and persons competent to frame an opinion, and that they have never been challenged or questioned in any way.

The years immediately following these Reports have been summarized, to stress the downward trend of prices, culminating in disastrous market levels and creating a situation in which Colonial producers were struggling desperately to keep up production and ensure survival, not only of their Industry, but of entire communities and whole administrations dependent on their resources as the only available source of revenue.

The intervention of fortuitous circumstances in Mauritius and of measures of cost readjustment, have been described, and we have endeavoured to weigh up their influence, separately and collectively on that relevelling of costs which was so obviously essential.

We believe we have managed to establish, on broad lines, that the decisive factors that have enabled the industry to reach *the present level of production costs* are those which may be classified under the general designation of providential circumstances, and which are, in the order of their influence, the following :

(a) Climatic conditions in 1935, 1936, 1937.
(b) High-yielding new varieties of cane.
(c) Reduced cost of Estate supplies.

We feel we have submitted sufficient evidence to show, to the satisfaction of all but casuists and quibblers, that these 3 determinants had a bearing on the situation out of all proportion to that excercised by the other factors we have examined, and in which labour wages are involved.

We will now endeavour to consider whether these 3 decisive factors (A, B & C.):

1) Have reduced costs permanently ?

2) Will continue to influence costs in the future to the same extent ?

3) Whether their salutary effect on the industry is such, and the relief they have brought so fundamental, that we can view the future with composure and can afford to raise the level of permanent costs, such as labour.

We will examine each consideration in the order given above under A, B. & C.

(A) There is no need to emphasize the point that climatic conditions are essentially transitory and their incidence on the lap of the gods. A good season is the exception rather than the rule ; an excellent harvest resulting in a bumper crop is a rare event in the annals of the Industry ; the returns of the past 50 years would show that two excellent harvests succeeding each other is an exception occurrence.

The fact that climatic conditions in 1935, 1936 and 1937 have been so extraordinarily propitious that three record crops have been reaped, constitutes one of those dispensations of Providence that are vouchsafed to us *once in a lifetime.*

To rely on the recurrence of such conditions, to anticipate their incidence, fully or partially, to expect their past effect to influence conditions in the future, would, admittedly, be empty as well as dangerous hypothesis.

It is equally clear therefore, that any computation of the future condition of the Industry and of its financial capacity, which allowed for costs of production *as they appear to be at present,* would be radically false, and seriously misleading.

(B) The effect of high-yielding cane varieties is another matter altogether, which must be approached in an entirely different manner.

This factor, undoubtedly, has a semblance of permanence which climatic conditions cannot have. The facts are known ; new cane varieties have been introduced into the Colony, and the rate of distribution has been sufficient to ensure that, at the present moment about 30,000 acres of land are under cultivation with the B. H. 10/12 and other new species.

We have seen that these new varieties were responsible for a considerable share of the increased production of the last few years, and in the normal course of things, allowing for a progression " in crescendo ", there is no doubt that, unless some unexpected biological disorder developed, or the new varieties were found unsuitable to certain districts, the period would certainly not be far distant when we could look forward to really large outputs, exceeding all past records.

As we all know, the record-breaking days of the Mauritius Sugar Industry are over. The Export Quota allocated to Mauritius by the Colonial Office as a result of the International Sugar Conference will limit our exports, for the next 5 years at least, to only 267,000 tons.

The distribution of the new varieties had led us to the threshold of greater things ; undoubtedly, salvation from all the ills of the industry appeared to be in sight with record crops following each other in unbroken sequence.

The Quota restriction just applied has put an effective kicking strap on all that. The Mauritius Sugar Industry's yearly production has now been restricted within the limits of a total tonnage of a maximum (including local consumption) of 277,000 tons, i.e., of exactly the same output as in 1914, a quarter of a century ago.

Since the enactment of the " Restriction of Exports " Ordinance of 1937, the favourable factor operating on costs of production which the new cane varieties promised has been harnessed by another factor : viz Restriction, operating by Statute.

It may, of course, be argued that intensive cultivation will bring down costs Intensive cultivation on a smaller total area to produce large yields within the restricted figure ! The problem is not within the scope of this survey ; it raises issues both technical and economic which this memorandum cannot cover. Intensive cultivation on a restricted area may solve the problem, but the proposition is fraught with difficulties at least as great as the favourable results anticipated, and it is not a pleasant outlook for labour, in any case.

The fact remains that the export quota has thrown a blanket over the development of new varieties, and " the promised land " of record crops.

In some quarters it is confidently believed that the International Agreement on restriction will result in improved market prices. We can only hope that they are right ; we believe that the agreement has been effective in avoiding a further collapse of the market, but judging from the level of prices since the agreement was signed 5 months ago, it is evident that those who believe in an increase of prices have not yet appeared on the market as buyers.

(C) We have seen that this factor had contributed very appreciably to the general reduction of costs of production between 1929 and 1935.

The principal items in Estate supplies are, as we have seen : Fertilizers, Gunnies, Coal and Manufactured Fuel, Hardware and Ironmongery, and Grain for Rations.

The point we now have to consider is whether the relative cheapness of these articles up to last season is going to affect cost of production favourably in future.

We need not say that this is hardly likely to be the case. The general tendency of the market in all these lines, except grain, is that prices are on the increase, and, in point of fact, prices have already gone up considerably, especially in Fertilizers, Coal, Hardware and Ironmongery.

The prices of Metals for instance, and indeed of all metal goods, Machinery, etc., have increased to an alarming extent, and prospects are that they will increase still further.

In fact, in all goods required by the Sugar Industry, especially in heavy goods, prices are clearly increasing ; the position is made worse by

the recent increase in freight rates, which will *further* affect cost of such goods as Fertilizers, Coal, Patent Fuel, Bricks, Gunnies, Machinery, etc.

It is evident, therefore, that not only will the cost of supplies to Estates disappear as a favourable factor in the matter of cost of production, but the indications are that it will act as an adverse factor in the future, and may *seriously enter into operation as a determinant of higher costs.* As matters stand, there is no doubt that the cost of production of next season (1938) will feel the effects of the increased price of all these articles.

If we summarize the situation so far as future conditions in the Industry are concerned, we cannot fail to be impressed by the following facts :

(1) That the present low cost of production, whatever it may be, was mainly due to exceptional climatic conditions operating consecutively during three seasons, to the effect of new varieties of cane, and to the reduced cost of Estate supplies.

(2) That it is entirely against the law of probabilities that these factors will continue to operate in anything like the same degree, if at all.

(3) That in the absence of these factors, it is perfectly certain that costs will increase appreciably.

(4) That in the event of these factors operating in the opposite direction (i.e. Cyclone, Drought, Increased Cost of supplies, or other such eventualities) costs of production will increase out of all proportion, and entirely alter the situation of the Industry.

In view of the above facts, we are strongly of the opinion that any view of the present favourable, but *entirely transitory* situation of the Industry, is without any value as a view of the future. We consider, moreover, that basic conditions in the Industry, in view of the action of the economic determinants we have outlined, are likely to deteriorate, and that, so far as the cost of production is concerned, the figure, in the normal course of events, is likely to increase in appreciable, and probably, in considerable measure.

In presence of such a condition of affairs, clearly revealed by factors known and assessed, and by prospects, estimated and probable, we consider that any burden imposed on the Industry, such as an increase of labour wages would involve, is to be strongly deprecated, as we sincerely believe that, under the circumstances, such a burden would be unjustified from every aspect of the situation.

(*To be continued*).

Revue des Publications Techniques

LACROIX (Alfred) — *Le Volcan actif de l'Ile de la Réunion et ses produits.*

(297 pages, 18 planches et une carte — Gauthier Villars, éditeurs, Paris, 1936).

Après sa monumentale " Minéralogie de Madagascar " en trois volumes parus en 1923, où il traite sommairement de la Réunion, de Maurice, etc, le professeur Lacroix a publié récemment un livre important sur le volcan de la Réunion. Il a recueilli dans cet ouvrage toutes les informations connues sur le volcan actif du Piton de la Fournaise, qu'il a lui-même visité en 1911 et auquel il n'a cessé de s'intéresser en publiant de nombreuses notes dans les Comptes Rendus de l'Académie des Sciences. Il faut dire que ce volcan a un attrait particulièrement vif pour le professeur Lacroix qui a aussi étudié tous les types d'activités volcaniques dans le monde et en particulier celui de la Montagne Pelée, à la Martinique.

Il écrit au début de son ouvrage : " La grande fluidité avec laquelle " s'épanche le magma basaltique du Piton de la Fournaise, comparable, à " ce point de vue, à celui des volcans d'Hawaï, détermine un dynamisme " qui est l'opposé de celui caractérisant l'activité de la Montagne Pelée " consistant en émission d'un magma dacitique, dans un état de grande " viscosité. ".

La constitution lithologique du massif du Piton de la Fournaise, composé du volcan actif et des deux cônes, est fort simple quand on la compare à celle du massif volcanique du Piton des Neiges qui constitue la majeure partie de l'île de la Réunion. Ce dernier massif plus ancien est depuis longtemps muet et a été profondément disséqué par l'érosion. " On relève cependant d'importantes analogies entre les roches de tout " cet ensemble. Les roches mésocrates et mélanocrates y prédominent, " basaltes et océanites en fait de laves épanchées, gabbros en fait de " roches intrusives. " — " L'analogie entre les deux massifs s'arrête là. " Dans le massif du Piton des Neiges, en effet, seules existent les laves " leucocrates ".

Le tableau ci-contre résume la comparaison de la constitution lithologique des deux massifs montagneux composant l'île de la Réunion, à la suite de plus de 75 analyses chimiques complètes.

Massif du Piton de la Fournaise (volcan actif et ses enveloppes)	*Massif du Piton des Neiges*	
Épanchements	*Epanchements*	*Intrusions*
	Basaltes	Dolérite hétérogène
Basaltes		Gabbro luscladitique
Ankaramite		
Océanites	Océanites	Harrisite
Nodules à Olivine (enclaves)	Nodules à Olivine (enclaves)	Dunite
	Andésites	Akérite
	Trachytes	
	Pantellérite	Syénite quartzique (granite)
		Monzonite

L'auteur termine son ouvrage par quelques notions sur la lithologie des îles Maurice et Rodriguez tout en regrettant la pauvreté des documents lithologiques réunis sur ces dernières.

Il écrit au sujet de Maurice : " Tous les anciens voyageurs ont cons-" taté la nature essentiellement basaltique de l'île avec de grandes coulées " creusées de tunnels semblables à ceux de la Réunion. " Il rappelle qu'après la note de M.S.J. Shand sur les laves de l'Ile Maurice parue en 1933... " s'évanouit l'hypothèse de l'existence d'un substratum non-" volcanique. " Le professeur Lacroix écrit en terminant : " Le petit " nombre d'analyses de roche (deux par Raoult, basalte doléritique de " Port-Louis et ankaramite océanite de la Montagne du Pouce) et (deux " par Shand, basalte doléritique de Curepipe et trachyte, limite de phono-" lite de Chamarel) ne permet pas une comparaison bien serrée avec " l'ensemble des roches du massif du Piton des Neiges auxquelles ce-" pendant il faut penser ".

Au cours de son ouvrage, l'auteur, sans négliger la valeur de l'examen des lames minces, attache une importance considérable à l'analyse chimique complète des roches volcaniques comme moyen le plus sûr d'arriver à leur classification. Ces analyses, en effet, permettent de déduire par le calcul la composition minéralogique virtuelle (norm) et les paramètres magmatiques utilisés dans sa " Classification des roches éruptives " parue en 1933, auquel il est bon de se référer pour bien suivre la partie lithologique du présent ouvrage.

P. H.

G. BARBIER — *Potasse et Agronomie.*
(Brochure de 41 pages. Imp Braun & Cie , Paris 1936).

C'est un résumé de nos connaissances sur le rôle du potassium en agronomie, domaine où l'auteur a apporté d'importantes contributions.

(1) Le potassium exerce une action spécifique sur la formation des hydrates de carbone dans les végétaux récoltés. Il favorise la migration des sucres vers les organes de réserve ou leur condensation à l'état d'amidon.

(2) Le potassium favorise également l'utilisation de l'azote minéral à l'élaboration des matières protéiques. De plus, l'assimilation et la transpiration ne peuvent s'accomplir normalement que si l'on maintient dans le milieu où se développe la plante un juste équilibre entre l'azote et la potasse.

(3) Les fumures potassiques confèrent à la plante une certaine résistance à une dessication précoce et jouent ainsi un rôle prépondérant au point de vue de l'économie de l'eau dans la plante.

(4) Les composés du calcium à caractère basique, calcaire ou chaux, exercent fréquemment une action antagoniste vis à vis de l'absorption par la plante du potassium des sols.

(5) Dans certains sols argileux, le potassium des engrais rétrograde, c.à.d. évolue au cours du temps vers une forme non échangeable, phénomène ayant pour conséquence une diminution progressive de l'assimilabilité de la potasse des engrais, qui se trouve pour ainsi dire peu à peu convertie en un capital portant très faible intérêt.

(6) L'utilisation croissante des engrais azotés a rendu de plus en plus utile l'emploi de la potasse, qui conditionne leur efficacité ; en l'absence

de potasse, l'emploi répété de fumures azotées devient rapidement inutile et même nuisible.

(7) Le moyen le plus sûr de reconnaître si une terre est susceptible de bénéficier ou non des engrais potassiques est d'expérimenter directement leur action sur les cultures. Cependant, l'expérimentation culturale doit être prolongée pendant plusieurs années sur chaque pièce étudiée, ce qui la rend particulièrement difficile à exécuter et à interpréter. D'où l'intérêt de méthodes rapides qui soient susceptibles de guider l'agriculteur en lui évitant de longs tâtonnements :

(a) Observations des cultures sur pied.— Si la pénurie de potasse peut fournir des symptômes caractéristiques sur les plantes permettant à un œil exercé de la diagnostiquer rapidement, ces indications ne sont utiles qu'en cas de pénurie accusée et sous réserve que la culture envisagée soit bien pourvue d'azote.

(b) Méthodes de laboratoire.— Aucune des méthodes utilisées dans les laboratoires n'est susceptible de résoudre avec une entière sécurité le problème de la fumure potassique considéré dans sa généralité, mais la plupart (potassium échangeable ou assimilable—Schlœsing de Sigmond— des terres par exemple) sont pratiquement utilisables si leurs normes d'interprétation ont été soumises à un contrôle régional et vérifiées pour chaque type de sol à l'aide d'essais culturaux prolongés.

(8) Il peut y avoir inconvénient à appliquer des doses de potasse dépassant les besoins de la récolte prochaine, car la meilleure utilisation de l'engrais possible se trouve réalisée par l'application de fumures d'entretien annuelles appropriées. A cet égard, les doses les plus avantageuses dépendent, avant tout, des exigences particulières des diverses cultures ; la richesse naturelle du sol envisagée en potasse doit également être prise en considération. Pratiquement, il suffira de savoir si le sol en question est particulièrement pauvre ou particulièrement riche à l'aide de l'analyse du sol bien interprétée.

(9) Le plus souvent les sels de potasse n'ont pas exercé d'action nuisible sur la qualité des produits récoltés lorsqu'ils ont été employés concurremment avec l'acide phosphorique et l'azote dans des proportions bien équilibrées en vue de l'obtention de hauts rendements.

P. H.

AYRES (Arthur) — *Les facteurs qui influencent la composition minérale de la canne à sucre.*

(Factors influe ncing the mineral composition of sugar cane).

Reports of the Association of Hawaiian Sugar Technologists— Fifteenth Annual Meeting 1936—p. 29.

Cet article traite des travaux hawaïens et autres portant sur l'influence qu'exercent l'âge, la variété, le climat, le sol et les apports d'engrais sur la composition minérale de la canne.

Après présentation de données analytiques importantes, l'auteur arrive à la conclusion que, pour un même sol, la composition minérale soit de la plante entière, soit de la tige, du jus ou de la tête avec ses feuilles varie d'une manière significative avec l'âge des cannes et la variété, ce qui l'amène à formuler de sérieuses réserves sur la valeur pratique de l'analyse chimique de ces divers organes comme moyen d'évaluation de la teneur

des sols en éléments nutritifs. Il propose, par contre, de faire porter l'analyse chimique sur le limbe d'une feuille d'un âge déterminé et d'éliminer par ce choix une large part des complications qu'entraînent les différences d'âge et de variétés de canne.

L'auteur nous met en garde contre les dangers qu'il y a de trop généraliser en décrivant certaines variétés de canne comme faibles ou grosses consommatrices de phosphate ou de potasse.

Il signale en terminant que des quantités variables d'un élément nutritif disponible entraînent le plus souvent non seulement des modifications dans la teneur de la plante en cet élément, mais encore modifient dans bien des cas celle des autres éléments nutritifs dans la plante.

P. H.

Rapport du Président du Mauritius Hemp Producers' Syndicate

pour l'année 1937.

MESSIEURS,

J'ai l'avantage de vous présenter un résumé de la marche des affaires de votre Syndicat pendant l'année qui vient de s'écouler.

L'Etat de Situation, dûment approuvé par l'Auditeur du Gouvernement, vous est soumis pour être ratifié.

Mouvement du Syndicat.

Pendant l'année 1937, le Syndicat a emmagasiné, aux fins d'exportations, **1.460,920** Kilogs de fibres de tous grades, contre **1.174.290** Kilogs reçus en 1936. La production a été quelque peu stimulée pendant le cours de l'année 1937, mais malheureusement sa durée n'a été qu'éphémère.

La classification suivante en est résultée :—

Superior	4.408 Kgs.	0.31 %
Prime	701.372 —	49.96 %
Very Good	391.439 —	27.88 %
Good	53.525 —	3.81 %
Fair	10.952 —	0.78 %
Common	734 —	0.06 %
Raw	241.533 —	17.20 %
	1.403.963 Kgs.	100.00 %
Sisal No. 1	34.963 —	61.45 %
Sisal No. 2	20.614 —	36.12 —
Sisal No. 3	1.380 —	2.43 —
	1.460.920 Kgs.	100.00 %

TABLEAU COMPARATIF DU POURCENTAGE DE GRADES DE 1928 à 1937

	Année 1928		1929		1930		1931		1932		1933		1934		1935		1936		1937	
	Ks.	%	Ks.	%	Ks.	%	Ks.	%	Ks.	%	Ks.	%	Ks.	%	Ks.	%	Ks.	%	Ks.	%
Superior ...	26.000	1.12	38.447	1.8(	38.860	3.17	533	00.15	12.220	3.22	3.615	1.25	27.539	3.39	.....	.....	.....	.....	4.408	00.31
Prime ..	404.000	17.31	549.342	25.82	438.806	35 81	134.561	36 47	139.776	36.77	179.803	51.67	361.047	44.51	50.996	61.28	690.526	63.09	701.372	49.96
Very good	627.750	27.06	608.370	28.58	349.000	28.48	108.589	29.44	85.084	22.87	81.742	23.61	287.494	35.44	22.589	27.12	275.678	25.19	391.439	27.88
Good ...	871.000	37.69	686.878	32.37	334.814	27.33	117.699	31.92	128.698	33.61	71 690	20.70	128.722	15.87	7.618	9.16	47.701	04.36	53.525	03.81
Fair ...	307.500	13.25	185.792	8.7[illegible]	57.171	4.66	6.982	01.89	12.266	3.23	6.313	1.83	6.309	0.78	980	1.18	4.803	00.44	10.952	00.78
Common ...	29.750	1.27	6.002	0.22	6.296	0.51	472	00.13	1.413	0.30	1.178	0.38	72	0.01	.....	.....	.....	.....	734	00.06
Raw ...	.....	.....	52.987	2.4	566	0.04	.....	.....	.....	.....	.....	.....	.....	.....	1.041	1.26	75.744	6.92	241.533	17.20
Hard ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
			2.127.818	100%	1.225.513	100%	368.836	100%	379.457	100%			811.183	100%	83.224	100%	1.094.452	100%	1.403.963	100%
Tow ...	13.750	0.59	.....	.....	.....	.....	.....	.....	.....	.....	.....	... ..	.....	.. ...	.....	.....	.....	.....	.....	.....
Sisal No. 1			9.408	27.05	7.734	28.02	... ..	.....	.....	.....	.....	.....	12.370	45.20	21.717	65.29	59.548	74.58	34.963	61.45
Sisal No. 2	39.750	1.71	17.575	43.63	16.854	61.04	.....	... ..	.....	.....	1.979	0.57	14.995	54 80	10.009	34.71	18.960	23.74	20.614	36.12
Sisal No. 3			13.022	29.32	3.022	10.94	547	54.14	... ...	.....	.....	.....	.....	.....	.....	.....	1.330	1.68	1.380	2.43
Raw Sisal	.....	.....	.....	.....	.....	.....	438	45.86	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2.319.500	100%	2 167.823	100%	1 253.123	100%	369.821	100%	379.457	100%	346.320	100%	838.548	100%	114.950	100%	1.174.290	100%	1.460.920	100%

Tableau comparatif d'exportation pendant les huit dernières années.

Année	U. K. Tons	Etats Unis d'Amérique Tons	Belgique Tons	France Tons	Espagne Tons	Allemagne Tons	Hollande	Canada	Total Tons
1929 ...	484.6	866.7	617.5	252.0	133.2	100.0	.....	.....	2454.0
1930 ...	175.5	221.1	671.8	252.0	142.6	5.0	.....	.....	1468.0
1931 ...	43.0	60.5	226.5	120.0	.....	5.0	.....	.....	455.0
1932 ...	155.1	93.9	46.0	121.0	.....	.....	.....	.....	416.0
1933 ...	185.5	76.8	113.7	46.0	.....	.....	.....	.....	422.0
1934 ...	463.7	15.6	92.8	96.9	.....	.....	.....	.....	669.0
1935 ...	213.5	25.0	17.5	85.0	10.0	5.0	.....	.....	356.0
1936 ...	649.9	122.0	325.3	58.1	.....	104.2	.....	.....	1259.5
1937 ...	947.2	61.6	419.5	58.7	.....	.....	188.8	5.1	1679.9
Totaux ...	3318.0	1543.2	2530.6	1089.7	285.8	219.2	187.8	5.1	9179.4

Nous avons eu l'honneur de présenter une adresse de bienvenue à Son Excellence Sir Bede Clifford, K.C.M.G., C.B., M.V.O., et à sa gracieuse compagne, qui ont débarqué sur nos rives le 23 Octobre 1937, et nous espérons que le séjour qu'ils feront parmi nous leur sera agréable et que le pays bénéficiera de l'expérience et des hautes qualités qui caractérisent notre nouveau Gouverneur.

Pendant le cours de l'année nous avons salué la venue d'un distingué visiteur, le Marquis de Dufferin et Ava ; c'est à souhaiter que de son court séjour à Maurice découleront des bienfaits pour le petit pays. Nous eûmes l'honneur de lui présenter une adresse de bienvenue.

Toute la communauté a été endeuillée par la disparition prématurée de notre éminent compatriote, l'Honorable Maurice Martin, C.B.E, qui a été pendant de nombreuses années intéressé dans l'industrie textile. Il a laissé le souvenir d'un parfait gentilhomme et d'un homme d'affaires expérimenté, dont les conseils ont été hautement appréciés dans toutes les sphères de l'activité mauricienne.

A nos dernières Assemblées Générales, nous avons parlé de la venue en cette île d'un Expert, et nous avions espéré voir le Gouvernement prendre l'initiative qui s'imposait pour maintenir une industrie qui périclitait. Rien n'a été fait jusqu'ici. Nous avions craint que, comme beaucoup d'autres, le Rapport de M. Alves n'aille augmenter les archives et ne soit, pour me servir de l'expression anglaise caractéristique en l'occurrence, " filed ". Mais un jour nouveau a lui : notre nouveau Gouverneur, Sir Bede Clifford, a bien voulu entendre nos justes revendications, et nous sommes convaincus qu'avant longtemps une solution sera apportée pour le maintien de notre industrie, qui a toute sa raison d'être, à beaucoup de points de vue.

la matière première localement, plus que jamais. Nous devons, nous aussi, tout tenter pour arriver à maintenir notre industrie.

De tout ce qui a été dit précédemment concernant l'Industrie Textile de ce pays, comme résumé nous arrivons à la conclusion suivante :—

Si, comme nous le croyons, le tissage des fibres est la seule planche de salut pour les filateurs, vu l'impossibilité pour eux de trouver un marché rémunérateur à l'extérieur, il nous semble donc que si le Gouvernement pouvait arriver à conclusion et voulait aider notre seconde industrie d'une manière efficace, la solution la plus élégante serait de faciliter la reprise du travail dans le plus bref délai possible sur les propriétés à aloès, en achetant les fibres au fur et à mesure de leur production, sur la base de Rs. 175 = la tonne ; le Gouvernement pourrait ainsi " stocker " la matière première, et par ce fait être assuré d'une alimentation régulière au moment opportun.

Si dans l'avenir des améliorations pouvaient être apportées à l'outillage actuel, amenant une réduction dans le coût de production des fibres, ce prix serait rabaissé proportionnellement. Il est avéré qu'avec les facteurs qui gouvernent la fabrication des fibres actuellement, il serait matériellement impossible de vendre au-dessous de Rs. 175 la tonne.

Mettons même que le Gouvernement se rende acquéreur d'environ 2,000 tonnes de fibres " Raw " (ce qui serait un maximum, vu que nous espérons qu'aussitôt l'assentiment du Secrétaire d'Etat aux Colonies obtenu, les améliorations à être apportées à l'usine des Quatre-Bornes seront activées le plus possible) et que, même s'il était nécessaire pour le Gouvernement de revendre les fibres à Rs. 160 la tonne à l'usine à tisser (pour permettre à celle-ci d'être une " paying proposition "), la différence qui résulterait entre le prix d'acquisition et le prix de vente ne serait que de **Rs. 15** par tonne, c à.d. une somme globale d'environ **Rs. 30,000**, ce qui ne serait certes pas énorme pour le Trésor (si un subside de ce genre était octroyé), qui est dans une situation florissante ; où encore, pour un début, l'usine à sacs pourrait se contenter de joindre les deux bouts. Cette solution serait à l'avantage de tous, et du Gouvernement lui-même en particulier. Ne combattrait-il pas ainsi en partie la crise du chômage ? Un autre facteur important qui ne doit pas nous échapper, et qui cause une grande anxiété aux filateurs, c'est l'anormale floraison des aloès cette année : ne serait-ce pas en même temps permettre l'utilisation des feuilles des plants d'aloès qui ont fléché ? Il est de notoriété que ces plants doivent disparaître après floraison, — d'où perte considérable et réduction dans la production pour l'avenir. Tandis qu'en coupant les feuilles, ces plants engendreraient d'autres, à l'avantage des plantations. Cette suggestion a toute sa raison d'être, en ces moments difficiles où les filateurs se trouvent dans une situation inextricable, et qui n'échappera pas à la sagacité proverbiale du chef du pays.

Donc, Messieurs, attendons de pied ferme la réalisation de ces projets, ayons confiance dans l'avenir et dans le sentiment d'équité qui guide notre nouveau Gouverneur ; une ère nouvelle ne tardera pas à luire pour les filateurs. L'Ile Maurice vivra et, avec elle, l'industrie textile prendra un nouvel essor.

Port-Louis, le 26 Février 1938.

(S) J. René MAINGARD de VILLE-ES-OFFRANS—*Président*,
M. H. P. S.

DEPARTMENT OF AGRICULTURE—MAURITIUS

Preliminary forecast of the 1938 sugar crop

(*Unit* : 1 *thousand metric tons*)

The production index, calculated on temperature and rainfall data from November 1937 to the end of May 1938 and on the assumption of average weather conditions till October next, is 89 as compared with 100 last year.

The tonnage of cane to be reaped works out, in consequence, to 2,514 thousand. With an extraction of sugar of 11.2% of cane, the anticipated sugar production equals 282 thousand metric tons.

The distribution according to districts and the comparison with previous years are given in the following table :

Districts	1938 Preliminary forecast	1937	1936	1935	1934	1933
Pamplemousses & Riv. du Rempart ...	71	82.65	63.97	69.97	30.13	57.77
Flacq	42	48.16	49.98	44.15	30.87	41.37
Moka	37	37.72	43.42	35.76	29.30	40.08
Plaines Wilhems ...	20	22.49	21.89	20.62	11.54	18.22
Black River	13	13.81	12.85	11.28	5.99	8.88
Savanne	48	51.76	52.13	45.34	32.66	44.48
Grand Port	51	57.23	56.10	53.38	38.37	50.66
Total	282	313.82	300.34	280.50	178.86	261.46

M. KŒNIG,
Statistican.

3.6.38

Statistiques

Marché des Grains

		1938 Mai	Juin
Dholl ...	... 75 Kilos	Rs. 11.00	Rs. 11.00
Riz ...	... 75 „	„ 8.75	„ 9.00
Gram ...	... 75 „	„ 12.00	„ 12.00
Avoine	... 100 „	„ 18.00	„ 20.00
Son ...	... 100 „	„ 16.00	„ 16 00

Marché des Sucres

Le Syndicat des Sucres avait vendu les quantités suivantes au 13 mai 1938 :

Coupe 1938-39

8,500 Tonnes de Raws @ Rs. 5.23 — Rs. 5.25 les % livres.
8,000 „ de Grade A @ Rs. 6.07 — Rs. 6.13 les % livres.